

The American Midland Naturalist

Founded by J. A. Nieuwland, C.S.C.

Editor

Robert E. Gordon

ASSOCIATE EDITORS

Rollin H. Baker, East Lansing, Michigan.....	Mammalogy
B. D. Burks, Washington, D.C.....	Entomology
Elon E. Byrd, Athens, Georgia.....	Parasitology
Albert L. Delisle, Sacramento 19, Calif.....	Plant Morphology
Theodosius Dobzhansky, New York, N.Y.....	Genetics and Cytology
Carroll Lane Fenton, New Brunswick, N.J.....	Invertebrate Paleontology
David G. Frey, Bloomington, Indiana.....	Animal Ecology
R. K. Godfrey, Tallahassee, Florida.....	Systematic Botany
Robert F. Inger, Chicago, Illinois.....	Herpetology
Paul J. Kramer, Durham, North Carolina.....	Plant Physiology
W. Gardner Lynn, Washington, D.C.....	Embryology
George Willard Martin, Iowa City, Iowa.....	Mycology
Calvin McMillan, Austin, Texas.....	Plant Ecology
Raymond A. Paynter, Jr., Cambridge, Mass.....	Ornithology
Robert W. Pennak, Boulder, Colorado.....	Invertebrate Zoology
Edward C. Raney, Ithaca, New York.....	Ichthyology

Vol. 71, 1964
(January, April)

PUBLISHED BY THE UNIVERSITY OF NOTRE DAME
NOTRE DAME, INDIANA

CONTENTS

No. 1, January, 1964

Muscles of the Pectoral limb in Galliform Birds	George E. Hudson and Patricia J. Lanzillotti	1
The Role of Soil in the Distribution of Four Grass Species in Texas.....	Elray S. Nixon and Calvin McMillan	114
Weights of Cotton Rats in Relation to Season, Breeding and Environmental Radioactive Contamination.....	P. B. Dunaway and S. V. Kaye	141
<i>Philoscia bonita</i> , a New Species of Isopod Crustacean from Florida	George A. Schultz	156
Pronotal Wings in <i>Blattella germanica</i> (L.) and Their Possible Evolutionary Significance	Mary H. Ross	161
Plant Succession in Temporary Ponds of the Willamette Valley Oregon.....	Byron E. Lippert and David L. Jameson	181
A Behavioral Analysis of the Mating Call of the Chorus Frog, <i>Pseudacris triseriata</i>	Bernard S. Martof and Eric F. Thompson, Jr.	198
Range Changes of Mammals in the Great Lakes Region.....	Antoon De Vos	210
Morphological and Mating Call Comparisons in the <i>Bufo valliceps</i> Complex	Kenneth R. Porter	232
Book Reviews		246

CONTENTS

No. 2, April, 1964

Taxonomy, Natural History, and Zoogeography of the Rainbow Snake, <i>Farancia erythrogramma</i> (Palisot de Beauvois)	Wilfred T. Neill	257
A Taxonomic Study of <i>Juncus</i> in Illinois	Robert A. DeFilippis	296
Orientation of the Painted Turtle, <i>Chrysemys picta</i>	Edward P. Ortleb and Owen J. Sexton	320
The Supraethmoid-Ethmoid Complex in the American Catfishes, <i>Ictalurus</i> and <i>Pylodictis</i>	F. E. Calovich and B. A. Branson	335
A Comparison of a Fossil Pleistocene Molluscan Fauna from North Dakota with a Recent Molluscan Fauna from Minnesota	Samuel J. Tuthill, Lee Clayton and Wilson M. Laird	344
Mycological Notes. III. New Taxa, Combinations, Host and Locality Records	Marie L. Farr	363
An Index of the Range of Activity	James E. White	369
Detection of Mates and Hosts by Parasitic Insects of the Genus <i>Megarhyssa</i> (Hymenoptera: Ichneumonidae)	Harold Heatwole, Donald M. Davis and Adrian M. Wenner	374
Amphibians and Reptiles from Meade County, Kentucky	James E. Craddock and W. L. Minckley	382
Brownfield Woods, Illinois: Woody Vegetation and Changes Since 1925	W. R. Boggess and L. W. Bailey	392
A Study of the Population of Insects Emerging as Adults from Saunders Pond at London, Ontario	W. W. Judd	402
The Neurosecretory System in the Head of the Blind Cave Crayfish <i>Cambarus setosus</i> Faxon	Milton Fingerman, Chitaru Oguro, Mitsuharu Miyawaki, and Robert G. McKinnell	415
The Ingestion of Xylem Sap by Meadow Spittlebugs, <i>Philaenus spumarius</i> (L.)	Richard G. Wiegert	422
Comparative Ecology of Bobwhite and Scaled Quail in the Oklahoma Panhandle	Sanford D. Schemnitz	429
Effects of Winter Water Conditions on Fifteen Species of Captive Marine Fishes	Frank J. Schwartz	434
The Troglotic Asellids of the United States: The Hobbisi Group	Harrison R. Steeves III	445
Observations on Treehopper Behavior (Homoptera, Membracidae)	Clifford J. Dennis	452
Blood Oxygen Capacity in Turtles...Harold J. Payne and Jack D. Burke		460
Packard's and Pearse's Species of Branchinecta: Analysis of a Nomen- clatural Involvement	James E. Lynch	466
Range Changes of Birds in the Great Lakes Region	Antoon De Vos	489
Notes and Discussion		
Parasites from the Common Snipe <i>Capella gallinago delicata</i> in Northern Colorado	Gerald D. Schmidt	503
<i>Asellus bicrenatus</i> , a Synonym of <i>A. alabamensis</i>	Harrison R. Steeves III	503
Book Reviews		505
Books Received		511

AUTHOR INDEX

Bailey, L. W.	392	Martof, Bernard S.	198
Bick, George H.	505	McIntosh, Robert P.	247
Bogges, W. R.	392	McKinnell, Robert G.	415
Branson, B. A.	335	McMillan, Calvin	114
Burke, Jack D.	460	Minckley, W. L.	382
		Miyawaki, Mitsuharu	415
Calovich, F. E.	335		
Clayton, Lee	344	Neill, Wilfred T.	257
Clewell, Andre F.	508	Nixon, Elray S.	114
Craddock, James E.	382		
		Oguro, Chitaru	415
Davis, Donald M.	374	Ortleb, Edward P.	320
DeFilipps, Robert A.	296		
Dennis, Clifford J.	452	Payne, Harold J.	460
De Vos, Antoon	210, 489	Paynter, Raymond A., Jr.	246
Dunaway, P. B.	141	Pennak, R. W.	249, 508, 510
		Porter, Kenneth R.	232
Farr, Marie L.	363		
Fingerman, Milton	415	Rai, K. S.	253
		Redfearn, Paul L.	506
Gordon, R. E.	251	Roscoe, Ernest J.	250, 251, 509
		Ross, Mary H.	161
Heatwole, Harold	374		
Hudson, George E.	1	Schemnitz, Sanford D.	429
		Schmidt, Gerald D.	503
Jaeger, Edmund C.	255	Schultz, George A.	156
Jameson, David L.	181	Schwartz, Frank J.	434
Judd, W. W.	402	Sexton, Owen J.	320
		Smith, Marion R.	249
Kaye, S. V.	141	Steeves, Harrison R., III.....	445, 503
Koopman, Karl F.	255		
		Thompson, Eric F., Jr.	198
Laird, Wilson M.	344	Tuthill, Samuel J.	344
Lanzillotti, Patricia J.	1		
Lippert, Byron E.	181	Wenner, Adrian M.	374
Lynch, James E.	466	White, James E.	369
		Wiegert, Richard G.	422

SUBJECT INDEX

- Abastor erythrogrammus* 257
 Activity range, mammals 369
 Amphibians, Kentucky 382
 mating call 198, 232
 Anatomy, fish skeletal 335
 pectoral limb 1
Asellus bicrenatus, synonymized 503
Asellus parvus, n. sp. 450

 Behavior, anuran 198
 bird 429
 home range 369
 treehopper 452
 turtle 320
 Birds, distribution changes 489
 pectoral anatomy 1
 quail 429
Blattella germanica, wings 161
Branchinecta, taxonomy 466
Branchinecta lindahli, n. sp. 482
Bufo valliceps 232

Callipepla squamata 429
Cambarus setosus, neurosecretory
 system 415
 Canada, insects 402
Capella gallinago, parasites 503
 Cave, asellids 445
Chrysemys picta 320
Colinus virginianus 429
 Colorado, bird parasites 503
 Community, energetics 422
 Crustacea, branchiopoda 466
 isopoda 156, 445
 neurosecretion 415

Farancia erythrogramma, n.
 comb. 265
Farancia erythrogramma seminola,
 n. ssp. 270
 Fish, marine 434
 mortality 434
 skeletal anatomy 335
 winter ecology 434
 Flora, changes in 392
 temporary pond 181
 Florida, isopod 156
 Fossil, mollusks 344
 Fungi, taxonomy 363

 Galliformes, pectoral anatomy 1
 Grass, distribution of 114
 Great Lakes, bird ranges 489
 mammal distribution 210

Ictalurus, anatomy 335
 Illinois, *Juncus* 296
 woody vegetation 392
 Insect, behavior 452
 evolution 161
 ingestion 422
 wing 161
 parasitic 374
 population 402

Juncus, in Illinois 296

 Kentucky, herpetology 382

 Mammals, weight 141
 home range 369
 range changes 210
Megarhyssa, host and mate
 detection 374
 Minnesota, molluscan fauna 344
 Mollusks, fossil 344

 Neurosecretion, crayfish 415
 North Dakota, molluscan fauna 344

 Oklahoma, quail 429
 Oregon, temporary pond 181
 Oxygen capacity, turtles 460

Peromyscus leucopus, activity
 range 369
Philaenus spumarius, ingestion 422
Philoscia bonita, n. sp. 156
 Ponds, flora of temporary 181
Pseudacris triseriata 198
Pycnosynesia intermedia,
 n. comb. 368
Pylodictis, anatomy 335

SUBJECT INDEX

Radiation, and mammal weights 141 Reptiles, orientation 329 physiology 460 systematics 257 Kentucky 382	<i>Stomiopeltis parkinsoniae</i>, n. comb. 366 Succession, plant 181 Texas, grasses 114 Turtle, blood oxygen 460 <i>Sigmodon hispidus</i> , weights 141 Soil and grass distribution 114
---	---

***Zopfia albiziae*, n. sp. 363**

DATES OF PUBLICATION

Volume 71, 1964

No. 1 (January)	January 15, 1964
No. 2 (April)	April 2, 1964

ERRATUM: In Volume 1, page 254, paragraph 4, line 6 should read "... Experiments" is the only contemporary author who has been introduced to the readers as "a . . . "